Page 1 of 7

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/997,931

DATE: 12/07/2001 P. S

TIME: 13:38:04

Input Set : A:\220.00010150.ST25.txt
Output Set: N:\CRF3\12072001\1997931.raw

ENTERED

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3 <110> APPLICANT: University of Rochester
              Kool, Eric
      6 <120> TITLE OF INVENTION: CIRCULAR DNA VECTORS FOR SYNTHESIS OF RNA AND DNA
      8 <130> FILE REFERENCE: 220.00010142
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/997,931
C--> 10 <141> CURRENT FILING DATE: 2001-11-30
     10 <150> PRIOR APPLICATION NUMBER: US 09/569,344
     11 <151> PRIOR FILING DATE: 2000-05-11
     13 <150> PRIOR APPLICATION NUMBER: US 08/805,631
     14 <151> PRIOR FILING DATE: 1997-02-26
     16 <150> PRIOR APPLICATION NUMBER: US 08/393,439
     17 <151> PRIOR FILING DATE: 1995-02-23
     19 <150> PRIOR APPLICATION NUMBER: US 08/047,860
     20 <151> PRIOR FILING DATE: 1993-04-15
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     32 <223> OTHER INFORMATION: linear precircle oligonucleotide
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     40 <212> TYPE: DNA
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69 <223> OTHER INFORMATION: multimer

RAW SEQUENCE LISTING DATE: 12/07/2001 PATENT APPLICATION: US/09/997,931 TIME: 13:38:04

Input Set : A:\220.00010150.ST25.txt
Output Set: N:\CRF3\12072001\1997931.raw

7. 100	
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74 cttcttctt ttccacccct tttcttctt ccctcttctt tctttccac ccctttctt	
76 tetteetet tetttettt ceaccettt tetttette etettette ttttccacce	180
78 cttttcttc ttccctcttc tttc	204
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87 <223> OTHER INFORMATION: circular template	
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94 <211> LENGTH: 29	
95 <212> TYPE: DNA	
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98 <220> FEATURE:	
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106 <211> LENGTH: 12	
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131 <212> TIPE. DNA 132 <213> ORGANISM: Artificial Sequence	
132 <2215 ORGANISM. ATCITICIAL Sequence 134 <220> FEATURE:	
135 <223> OTHER INFORMATION: circular template	
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RAW SEQUENCE LISTING DATE: 12/07/2001 PATENT APPLICATION: US/09/997,931 TIME: 13:38:04

Input Set : A:\220.00010150.ST25.txt
Output Set: N:\CRF3\12072001\I997931.raw

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147	<223> OTHER INFORMATION: multimer product	
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168	<211> LENGTH: 27	
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179	<210> SEQ ID NO: 13	
180	<211> LENGTH: 34	
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182	<213> ORGANISM: Artificial Sequence	
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210	and onomination and the polytonice	

RAW SEQUENCE LISTING

DATE: 12/07/2001

PATENT APPLICATION: US/09/997,931

TIME: 13:38:04

Input Set : A:\220.00010150.ST25.txt
Output Set: N:\CRF3\12072001\I997931.raw

<220>	FEATURE:	
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	<del>-</del>	
	`	
		2.0
		39
		34
-		34
		34
_		
	-	
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_		34
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292 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 12/07/2001

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PATENT APPLICATION: US/09/997,931

TIME: 13:38:04

Input Set: A:\220.00010150.ST25.txt
Output Set: N:\CRF3\12072001\1997931.raw

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- 299 <210> SEQ ID NO: 23
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- 302 <213> ORGANISM: Artificial Sequence
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- 307 <220> FEATURE:
- 308 <221> NAME/KEY: misc\_feature
- 309 <222> LOCATION: (4)..(23)
- 310 <223> OTHER INFORMATION: a, g, c, or t
- 313 <400> SEQUENCE: 23
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  - 318 <211> LENGTH: 31
  - 319 <212> TYPE: DNA
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  - 325 <220> FEATURE:
  - 326 <221> NAME/KEY: misc\_feature
  - 327 <222> LOCATION: (12)..(31)
  - 328 <223> OTHER INFORMATION: a, g, c, or t
  - 331 <400> SEQUENCE: 24
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  - 343 <220> FEATURE:
  - 344 <221> NAME/KEY: misc\_feature
  - 345 <222> LOCATION: (10)..(29)
  - 346 <223> OTHER INFORMATION: a, g, c, or t
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  - 353 <210> SEQ ID NO: 26
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  - 361 <220> FEATURE:
  - 362 <221> NAME/KEY: misc\_feature
  - 363 <222> LOCATION: (7)..(26)
  - 364 <223> OTHER INFORMATION: a, g, c, or t

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 12/07/2001

PATENT APPLICATION: US/09/997,931

TIME: 13:38:05

Input Set : A:\220.00010150.ST25.txt Output Set: N:\CRF3\12072001\I997931.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 L:332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 L:368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 L:460 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  $L:478\ M:341\ W:$  (46) "n" or "Xaa" used, for SEQ ID#:34 L:562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 L:1008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73  $L:1053 \ M:341 \ W:$  (46) "n" or "Xaa" used, for SEQ ID#:76  $L:1194\ M:300\ W:$  (50) Intentionally skipped Sequence, : Sequence Id (88) SEQUENCE:  $L\!:\!1223~M\!:\!341~W\!:$  (46) "n" or "Xaa" used, for SEQ ID#:90 L:1364~M:341~W:~(46)~"n"~or~"Xaa"~used, for SEQ~ID#:101L:1375 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (102) SEQUENCE: L:1383 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (103) SEQUENCE: L:1457 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (110) SEQUENCE: